

FM/MW/LW Compact Disc Player

Operating Instructions _____ GB

Bedienungsanleitung _____ DE

Mode d'emploi _____ FR

Istruzioni per l'uso _____ IT

Gebruiksaanwijzing _____ NL

To cancel the demonstration (DEMO) display, see page 6.

Zum Deaktivieren der Demo-Anzeige (DEMO) schlagen Sie bitte auf Seite 6 nach.

Pour annuler la démonstration (DEMO), reportez-vous à la page 6.

Per annullare la dimostrazione (DEMO), vedere pagina 6.

Om de demonstratie (DEMO) te annuleren, zie pagina 6.

CDX-GT450U



Be sure to install this unit in the dashboard of the car for safety. For installation and connections, see the supplied installation/connections manual.

CLASS 1 LASER PRODUCT

This label is located on the bottom of the chassis.

Notice for customers: the following information is only applicable to equipment sold in countries applying EU Directives

The manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.



Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

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MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.

Warning if your car's ignition has no ACC position

Be sure to set the Auto Off function (page 17). The unit will shut off completely and automatically in the set time after the unit is turned off, which prevents battery drain.

If you do not set the Auto Off function, press and hold **(SOURCE/OFF)** until the display disappears each time you turn the ignition off.

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Support site

If you have any questions or for the latest support information on this product, please visit the web site below:

<http://support.sony-europe.com/>









Provides information on:

- Models and manufacturers of compatible digital audio players
- Supported MP3/WMA/AAC files

Getting Started

Playable discs on this unit

This unit can play CD-DA (also containing CD TEXT) and CD-R/CD-RW (MP3/WMA/AAC files (page 19)).

Type of discs	Label on the disc	
CD-DA		
		
MP3 WMA AAC		
		

Resetting the unit

Before operating the unit for the first time, or after replacing the car battery or changing the connections, you must reset the unit.

Detach the front panel (page 7) and press the RESET button (page 8) with a pointed object, such as a ball-point pen.

Note

Pressing the RESET button will erase the clock setting and some stored contents.

Canceling the DEMO mode

You can cancel the demonstration display which appears during turning off.

- 1 Press and hold the select button.**
The setup display appears.
- 2 Rotate the control dial until "DEMO" appears, then press it.**
- 3 Rotate the control dial to select "DEMO-OFF," then press it.**
The setting is complete.
- 4 Press ↵ (BACK).**
The display returns to normal reception/play mode.

Setting the clock

The clock uses a 24-hour digital indication.

- 1 Press and hold the select button.**
The setup display appears.
- 2 Rotate the control dial until "CLOCK-ADJ" appears, then press it.**
The hour indication flashes.
- 3 Rotate the control dial to set the hour and minute.**
To move the digital indication, press (SEEK) -/+.
- 4 After setting the minute, press the select button.**
The setup is complete and the clock starts.

To display the clock, press (DSPL). Press (DSPL) again to return to the previous display.

Tip

You can set the clock automatically with the RDS feature (page 11).

Detaching the front panel

You can detach the front panel of this unit to prevent theft.

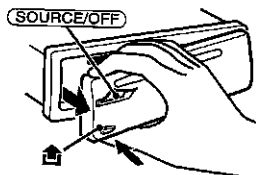
Caution alarm

If you turn the ignition switch to the OFF position without detaching the front panel, the caution alarm will sound for a few seconds. The alarm will only sound if the built-in amplifier is used.

1 Press and hold **(SOURCE/OFF)**.

The unit is turned off.

2 Press , then pull it off towards you.

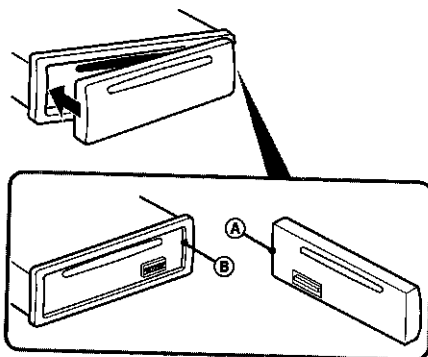


Notes

- Do not drop or put excessive pressure on the front panel and display window.
- Do not subject the front panel to heat/high temperature or moisture. Avoid leaving it in a parked car or on a dashboard/rear tray.
- Do not detach the front panel during playback of the USB device, otherwise USB data may be damaged.

Attaching the front panel

Engage part **(A)** of the front panel with part **(B)** of the unit, as illustrated, and push the left side into position until it clicks.

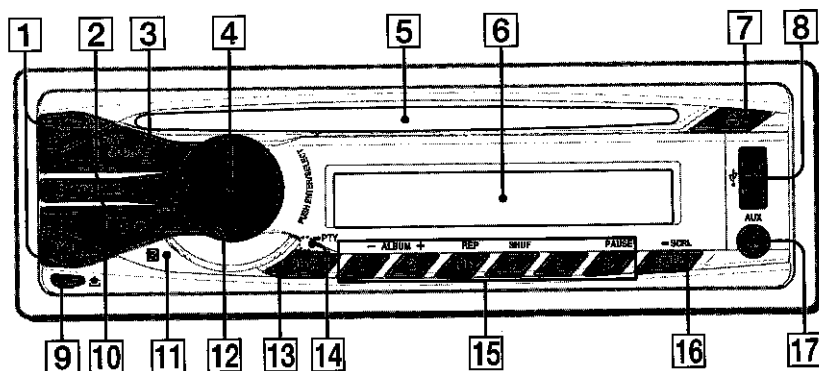


Note

Do not put anything on the inner surface of the front panel.

Location of controls and basic operations

Main unit



This section contains instructions on the location of controls and basic operations. For details, see the respective pages.

1 SEEK +/- buttons

Radio:

To tune in stations automatically (press); find a station manually (press and hold).

CD/USB:

To skip tracks (press); skip tracks continuously (press, then press again within about 1 second and hold); reverse/fast-forward a track (press and hold).

2 Q (BROWSE) button page 13

To enter the Quick-BrowZer™ mode.

3 SOURCE/OFF button

Press to turn on the power/change the source (Radio/CD/USB/AUX).

Press for 1 second to turn off the power.

Press for more than 2 seconds to turn off the power and the display disappears.

4 Control dial/select button page 14, 17

To adjust volume (rotate); select setup items (press and rotate).

5 Disc slot

Insert the disc (label side up), playback starts.

6 Display window

7 ▲ (eject) button

To eject the disc.

8 USB connector page 12

To connect to the USB device.

9 🗑 (front panel release) button page 7

10 ↶ (BACK)/MODE button page 10, 13

Press to return to the previous display/select the radio band (FM/MW/LW).

11 Receptor for the card remote commander

12 ZAP button page 14

To enter ZAPPIN™ mode.

13 AF (Alternative Frequencies)/

TA (Traffic Announcement)/

PTY (Program Type) button page 11

To set AF and TA (press); select PTY (press and hold) in RDS.

14 RESET button (located behind the front panel) page 6

15 Number buttons

Radio:

To receive stored stations (press); store stations (press and hold).

CD/USB:

①/②: ALBUM -/+ (during MP3/WMA/AAC playback)

To skip albums (press); skip albums continuously (press and hold).

③: REP* page 12, 13

④: SHUF page 12, 13

⑥: PAUSE

To pause playback. To cancel, press again.

16 DSPL (display)/SCRL (scroll) button
page 10, 12, 13

To change display items (press); scroll the display item (press and hold).

17 AUX Input jack page 18

To connect a portable audio device.

** This button has a tactile dot.*

Note

When ejecting/inserting a disc, keep any USB devices disconnected to avoid damage to the disc.

Radio

Storing and receiving stations

Caution

When tuning in stations while driving, use Best Tuning Memory (BTM) to prevent an accident.

Storing automatically — BTM

- 1 Press **(SOURCE/OFF)** repeatedly until "TUNER" appears.
To change the band, press **(MODE)** repeatedly. You can select from FM1, FM2, FM3, MW or LW.
- 2 Press and hold the select button.
The setup display appears.
- 3 Rotate the control dial until "BTM" appears, then press it.
The unit stores stations in order of frequency on the number buttons.
A beep sounds when the setting is stored.

Storing manually

- 1 While receiving the station that you want to store, press and hold a number button (1 to 6) until "MEM" appears.

Note

If you try to store another station on the same number button, the previously stored station will be replaced.

Tip

When a RDS station is stored, the AF/TA setting is also stored (page 11).

Receiving the stored stations

- 1 Select the band, then press a number button (1 to 6).

Tuning automatically

- 1 Select the band, then press **(SEEK) +/-** to search for the station.
Scanning stops when the unit receives a station. Repeat this procedure until the desired station is received.

Tip

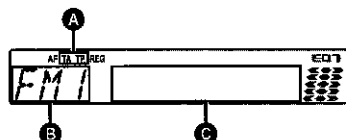
If you know the frequency of the station you want to listen to, press and hold **(SEEK) +/-** to locate the approximate frequency, then press **(SEEK) +/-** repeatedly to fine adjust to the desired frequency (manual tuning).

RDS

Overview

FM stations with Radio Data System (RDS) service send inaudible digital information along with the regular radio program signal.

Display items



- A TA/TP*1
- B Radio band, Function
- C Frequency*2 (Program service name), Preset number, Clock, RDS data

*1 "TA" flashes during traffic information. "TP" lights up while such a station is received.

2 While receiving the RDS station, "" is displayed on the left of the frequency indication.

To change display items C, press **(DSPL)**.

RDS services

This unit automatically provides RDS services as follows:

AF (Alternative Frequencies)

Selects and retunes the station with the strongest signal in a network. By using this function, you can continuously listen to the same program during a long-distance drive without having to retune the same station manually.

TA (Traffic Announcement)/TP (Traffic Program)

Provides current traffic information/programs. Any information/program received, will interrupt the currently selected source.

PTY (Program Types)

Displays the currently received program type. Also searches your selected program type.

CT (Clock Time)

The CT data from the RDS transmission sets the clock.

Notes

- Depending on the country/region, not all RDS functions may be available.
- RDS will not work if the signal strength is too weak, or if the station you are tuned to is not transmitting RDS data.

Setting AF and TA

- 1 Press **(AF/TA)** repeatedly until the desired setting appears.

Select	To
AF-ON	activate AF and deactivate TA.
TA-ON	activate TA and deactivate AF.
AF/TA-ON	activate both AF and TA.
AF/TA-OFF	deactivate both AF and TA.

Storing RDS stations with the AF and TA setting

You can preset RDS stations along with the AF/TA setting. If you use the BTM function, only RDS stations are stored with the same AF/TA setting.

If you preset manually, you can preset both RDS and non-RDS stations with the AF/TA setting for each.

- 1 Set AF/TA, then store the station with BTM or manually.

Receiving emergency announcements

With AF or TA on, the emergency announcements will automatically interrupt the currently selected source.

Tip

If you adjust the volume level during a traffic announcement, that level will be stored into memory for subsequent traffic announcements, independently from the regular volume level.

Staying with one regional program — REGIONAL

When the AF function is on: this unit's factory setting restricts reception to a specific region, so you will not be switched to another regional station with a stronger frequency.

If you leave this regional program's reception area, set "REG-OFF" in setup during FM reception (page 17).

Note

This function does not work in the UK and in some other areas.

Local Link function (UK only)

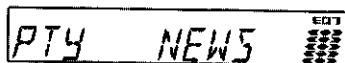
This function enables you to select other local stations in the area, even if they are not stored on your number buttons.

- 1 During FM reception, press a number button (**1** to **6**) on which a local station is stored.
- 2 Within 5 seconds, press again a number button of the local station.

Repeat this procedure until the local station is received.

Selecting PTY

- 1 Press and hold **(AF/TA)** (PTY) during FM reception.



The current program type name appears if the station is transmitting PTY data.

- 2 Rotate the control dial until the desired program type appears, then press it.

The unit starts to search for a station broadcasting the selected program type.

Type of programs

NEWS (News), **AFFAIRS** (Current Affairs), **INFO** (Information), **SPORT** (Sports), **EDUCATE** (Education), **DRAMA** (Drama), **CULTURE** (Culture), **SCIENCE** (Science), **VARIED** (Varied), **POP M** (Pop Music), **ROCK M** (Rock Music), **EASY M** (M.O.R. Music), **LIGHT M** (Light classical), **CLASSICS** (Serious classical), **OTHER M** (Other Music), **WEATHER** (Weather), **FINANCE** (Finance), **CHILDREN** (Children's program), **SOCIAL A** (Social Affairs), **RELIGION** (Religion), **PHONE IN** (Phone In), **TRAVEL** (Travel), **LEISURE** (Leisure), **JAZZ** (Jazz Music), **COUNTRY** (Country Music), **NATION M** (National Music), **OLDIES** (Oldies Music), **FOLK M** (Folk Music), **DOCUMENT** (Documentary)

Note

You cannot use this function in countries/regions where no PTY data is available.

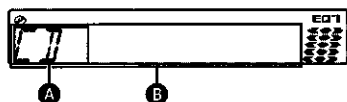
Setting CT

- 1 Set "CT-ON" in setup (page 17).

Notes

- The CT function may not work even though an RDS station is being received.
- There might be a difference between the time set by the CT function and the actual time.

Display items



A Source

B Track name*¹, Disc/artist name*¹, Artist name*¹, Album number*², Album name*¹, Track number/Elapsed playing time, Clock

*¹ The information of a CD TEXT, MP3/WMA/AAC is displayed.

*² Album number is displayed only when the album is changed.

To change display items **B**, press **(DSPL)**.

Tip

Displayed items may differ depending on the disc type, recording format and settings.

Repeat and shuffle play

1 During playback, press **(3)** (REP) or **(4)** (SHUF) repeatedly until the desired setting appears.

Select	To play
↶ TRACK	track repeatedly.
↶ ALBUM*	album repeatedly.
SHUF ALBUM*	album in random order.
SHUF DISC	disc in random order.

* When an MP3/WMA/AAC is played.

After 3 seconds, the setting is complete.

To return to normal play mode, select "**↶ OFF**" or "**SHUF OFF**".

USB devices

For details on the compatibility of your USB device, visit the support site.

Support site

<http://support.sony-europe.com/>

- MSC (Mass Storage Class) and MTP (Media Transfer Protocol) type USB devices compliant with the USB standard can be used.
- Corresponding codec is MP3 (.mp3), WMA (.wma), AAC (.m4a) and AAC (.mp4).
- Backup of data in a USB device is recommended.

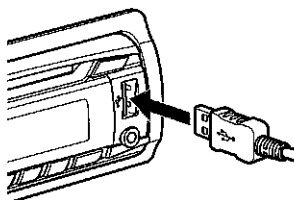
Note

Connect the USB device after starting the engine. Depending on the USB device, malfunction or damage may occur if it is connected before starting the engine.

Playing back a USB device

1 Connect the USB device to the USB connector.

When using a cable, use the one supplied with the USB device to connect.



Playback starts.

If a USB device is already connected, to start playback, press **(SOURCE/OFF)** repeatedly until "USB" appears.

Press and hold **(SOURCE/OFF)** for 1 second to stop playback.

Removing the USB device

1 Stop the USB device playback.

2 Remove the USB device.

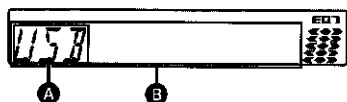
If you remove your USB device during playback, data in the USB device may be damaged.

Notes

- Do not use USB devices so large or heavy that they may fall down due to vibration, or cause a loose connection.
- Do not detach the front panel during playback of the USB device, otherwise USB data may be damaged.

- This unit cannot recognize USB devices via a USB hub.

Display items



- A** Source
- B** Track name, Artist name, Album number*, Album name, Track number/Elapsed playing time, Clock

* Album number is displayed only when the album is changed.

To change display items **B**, press **(DSPL)**.

Notes

- Displayed items will differ, depending on the USB device, recorded format and settings. For details, visit the support site.
- The maximum number of displayable data is as follows.
 - folders (albums): 128
 - files (tracks) per folder: 500
- Do not leave a USB device in a parked car, as malfunction may result.
- It may take time for playback to begin, depending on the amount of recorded data.
- DRM (Digital Rights Management) files may not be played.
- During playback or fast-forward/reverse of a VBR (Variable Bit Rate) MP3/WMA/AAC file, elapsed playing time may not display accurately.
- Playback of the following MP3/WMA/AAC files is not supported.
 - lossless compression
 - copyright-protected

Repeat and shuffle play

- 1 During playback, press **(3)** (REP) or **(4)** (SHUF) repeatedly until the desired setting appears.

Select	To play
↺ TRACK	track repeatedly.
↺ ALBUM	album repeatedly.
SHUF ALBUM	album in random order.
SHUF DEVICE	device in random order.

After 3 seconds, the setting is complete.

To return to normal play mode, select “**↺ OFF**” or “**SHUF OFF**.”

Searching for a track

Searching a track by name — Quick-BrowZer™

You can search for a track in a CD or USB device easily by category.

- 1 Press **Q** (BROWSE).
The unit enters the Quick-BrowZer mode, and the list of search categories appears.
- 2 Rotate the control dial to select the desired search category, then press it to confirm.
- 3 Repeat step 2 until the desired track is selected.
Playback starts.

To return to the previous display

Press **↵** (BACK).

To exit the Quick-BrowZer mode

Press **Q** (BROWSE).

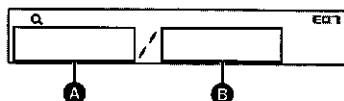
Note

When entering the Quick-BrowZer mode, the repeat/shuffle setting is canceled.

Searching by skip items — Jump mode

When many items are in a category, you can search for a desired item quickly.

- 1 Press **(SEEK)** + in Quick-BrowZer mode.
The following display appears.



- A** Current item number
- B** Total item number in the current layer

Then the item name will appear.

- 2 Rotate the control dial to select the desired item or one near the desired item.

It skips in steps of 10% of the total item number.

- 3 Press the select button.

The display returns to the Quick-BrowZer mode and the selected item appears.

- 4 Rotate the control dial to select the desired item and press it.

Playback starts if the selected item is a track.

continue to next page → 13

To cancel Jump mode

Press **↵** (BACK) or **(SEEK)** -.

Note

If no operation is performed for 7 seconds, the Jump mode is canceled.

Searching a track by listening to track passages — ZAPPIN™

While playing back short track passages in a CD or USB device in sequence, you can search for a track you want to listen to.

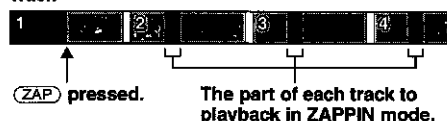
ZAPPIN mode is suitable for searching for a track in shuffle or shuffle repeat mode.

1 Press **(ZAP)** during playback.

After "ZAPPIN" appears in the display, playback starts from a passage of the next track.

The passage is played for the set time, then a click sounds and the next passage starts.

Track



2 Press the select button or **(ZAP)** when a track you want to listen is played back.

The track that you select returns to normal play mode from the beginning.

To search a track by ZAPPIN mode again, repeat steps 1 and 2.

Tips

- You can select the playback time from about 6 seconds/15 seconds/30 seconds (page 17). You cannot select the passage of the track to playback.
- Press **(SEEK)** +/- or **(1)/(2)** (ALBUM +/-) in ZAPPIN mode to skip a track or album.
- Pressing **↵** (BACK) also confirms a track to playback.

Sound Settings and Setup Menu

Changing the sound settings

Adjusting the sound characteristics

- 1 During reception/playback, press the select button.
- 2 Rotate the control dial until the desired menu item appears, then press it.
- 3 Rotate the control dial to select the setting, then press it.
The setting is complete.
- 4 Press **↵** (BACK).
The display returns to normal reception/play mode.

The following items can be set (follow the page reference for details):

EQ7 PRESET (page 15)

EQ7 SETTING (page 15)

POSITION

SET POSITION (Listening Position setting) (page 15)

ADJ POSITION*1 (Listening Position adjustment) (page 16)

SET SW POS*1*2 (Subwoofer Position setting) (page 16)

BALANCE

Adjusts the sound balance: "RIGHT-15" – "CENTER" – "LEFT-15."

FADER

Adjusts the relative level: "FRONT-15" – "CENTER" – "REAR-15."

DM+ (page 16)

RB ENH (Rear Bass Enhancer) (page 16)

SW LEVEL*2 (Subwoofer Level)

Adjusts the subwoofer volume level: "+10 dB" – "0 dB" – "-10 dB."
("ATT" is displayed at the lowest setting.)

AUX VOL*3 (AUX Volume level)

Adjusts the volume level for each connected auxiliary equipment: "+18 dB" – "0 dB" – "-8 dB."

This setting negates the need to adjust the volume level between sources.

*1 Hidden when "SET POSITION" is set to "OFF."

*2 When the audio output is set to "SUB-OUT" (page 17).

*3 When AUX source is activated (page 18).

Enjoying sophisticated sound functions — Advanced Sound Engine

Advanced Sound Engine, Sony's new sound engine, creates an ideal in-car sound field with digital signal processing. Advanced Sound Engine contains the following features: EQ7, Listening Position, DM+ Advanced, Rear Bass Enhancer.

Selecting the sound quality — EQ7 Preset

You can select an equalizer curve from 7 equalizer curves ("XPLOD," "VOCAL," "EDGE," "CRUISE," "SPACE," "GRAVITY," "CUSTOM" or "OFF").

- 1 During reception/playback, press the select button.
- 2 Rotate the control dial until "EQ7 PRESET" appears, then press it.
- 3 Rotate the control dial until the desired equalizer curve appears, then press it.
- 4 Press \rightarrow (BACK).

The display returns to normal reception/play mode.

To cancel the equalizer curve, select "OFF" in step 3.

Tip

The equalizer curve setting can be memorized for each source.

Customizing the equalizer curve — EQ7 Setting

"CUSTOM" of EQ7 allows you to make your own equalizer settings.

- 1 Select a source, then press the select button.
- 2 Rotate the control dial until "EQ7 SETTING" appears, then press it.
- 3 Rotate the control dial until "BASE" appears, then press it.
You can select an equalizer curve as a basis for further customizing.
To not customize a preset equalizer curve, skip to step 5.

- 4 Rotate the control dial to select the equalizer curve, then press it.

5 Setting the equalizer curve.

- 1 Rotate the control dial to select the frequency range, then press it.

SET BAND 1

BAND1: 63 Hz
BAND2: 160 Hz
BAND3: 400 Hz
BAND4: 1 kHz
BAND5: 2.5 kHz
BAND6: 6.3 kHz
BAND7: 16.0 kHz

- 2 Rotate the control dial to adjust the volume level, then press it.
The volume level is adjustable in 1 dB steps, from -6 dB to +6 dB.

B1 + 6dB

Repeat steps 1 and 2 to adjust other frequency ranges.

6 Press \rightarrow (BACK) twice.

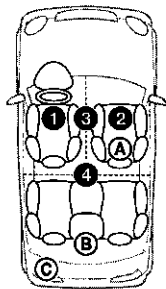
The equalizer curve is stored in "CUSTOM," and the display returns to normal reception/play mode.

Optimizing sound by Time Alignment — Listening Position

The unit can change the localization of sound by delaying the sound output from each speaker to suit your position, and simulate a natural sound field with the feeling of being in the center of it wherever you sit in the car.

The options for "POSITION" are indicated below.

- "FRONT L" (1): Front left
"FRONT R" (2): Front right
"FRONT" (3): Center front
"ALL" (4): In the center of your car
"OFF": No position set



You can also set the approximate subwoofer position from your listening position if:
— the audio output is set to "SUB-OUT" (page 17).
— the listening position is set besides "OFF"

The options for "SET SW POS" are indicated below.

"NEAR" (A): Near

"NORMAL" (B): Normal

"FAR" (C): Far

- 1 During reception/playback, press the select button.
- 2 Rotate the control dial until "SET POSITION" appears, then press it.
- 3 Rotate the control dial to select from "FRONT L," "FRONT R," "FRONT" or "ALL," then press it.
- 4 Rotate the control dial until "SET SW POS" appears, then press it.
If you select "FRONT L," "FRONT R," "FRONT" or "ALL" in step 3 above, you can set the subwoofer position.
Rotate the control dial to select from "NEAR," "NORMAL" or "FAR," then press it.
- 5 Press ↵ (BACK).
The display returns to normal reception/play mode.

To cancel listening position, select "OFF" on step 3.

Adjusting the listening position

You can fine-tune the listening position setting.

- 1 During reception/playback, press the select button.
- 2 Rotate the control dial until "ADJ POSITION" appears, then press it.
- 3 Rotate the control dial to adjust the listening position, then press it.
Adjustable range: "+3" - "CENTER" - "-3."
- 4 Press ↵ (BACK).
The display returns to normal reception/play mode.

DM+ Advanced

DM+ Advanced improves digitally compressed sound by restoring high frequencies lost in the compression process.

- 1 During playback, press the select button.
- 2 Rotate the control dial until "DM+" appears, then press it.
- 3 Rotate the control dial to select "ON," then press it.
- 4 Press ↵ (BACK).
The display returns to normal play mode.

Tip

The DM+ setting can be memorized for each source.

Using rear speakers as subwoofer — Rear Bass Enhancer

Rear Bass Enhancer enhances the bass sound by applying the low pass filter setting (page 17) to the rear speakers. This function allows the rear speakers to work as a subwoofer if one is not connected.

- 1 During reception/playback, press the select button.
- 2 Rotate the control dial until "RB ENH" appears, then press it.
- 3 Rotate the control dial to select from "1," "2" or "3," then press it.
- 4 Press ↵ (BACK).
The display returns to normal reception/play mode.

Adjusting setup items — SET

- 1 Press and hold the select button.**
The setup display appears.
- 2 Rotate the control dial until the desired item appears, then press it.**
- 3 Rotate the control dial to select the setting, then press it.***
The setting is complete.
- 4 Press ↵ (BACK).**
The display returns to normal reception/play mode.

* For **CLOCK-ADJ** and **BTM** settings, step 4 is not necessary.

Note

Displayed items will differ, depending on the source and setting.

The following items can be set (follow the page reference for details):

CLOCK-ADJ (Clock Adjust) (page 6)

CT (Clock Time)

Activates the CT function: "ON," "OFF"
(page 10, 11).

BEEP

Activates the beep sound: "ON," "OFF."

AUX-A*¹ (AUX Audio)

Activates the AUX source display: "ON," "OFF" (page 18).

AUTO OFF

Shuts off automatically after a desired time when the unit is turned off: "NO," "30S (Seconds)," "30M (Minutes)," "60M (Minutes)."

REAR/SUB*¹

Switches the audio output: "SUB-OUT" (subwoofer), "REAR-OUT" (power amplifier).

DEMO (Demonstration)

Activates the demonstration: "ON," "OFF."

DIMMER

Changes the display brightness: "ON," "OFF."

M.DISPLAY (Motion Display)

- "SA": to show moving patterns and spectrum analyzer.
- "OFF": to deactivate the Motion Display.

AUTO SCR (Auto Scroll)

Scrolls long items automatically: "ON," "OFF."

LOCAL (Local Seek Mode)

- "ON": to only tune into stations with stronger signals.
- "OFF": to tune normal reception.

MONO*² (Monaural Mode)

Selects monaural reception mode to improve poor FM reception: "ON," "OFF."

REGIONAL*²

Restricts reception to a specific region: "ON," "OFF" (page 11).

ZAP TIME (Zappin Time)

Selects the playback time for the ZAPPIN function.

- "Z.TIME-1 (about 6 seconds)," "Z.TIME-2 (about 15 seconds)," "Z.TIME-3 (about 30 seconds)."

ZAP BEEP (Zappin Beep)

Has the beep sound between track passages: "ON," "OFF."

LPF FREQ*³ (Low Pass Filter Frequency)

Selects the subwoofer cut-off frequency: "50Hz," "60Hz," "80Hz," "100Hz," "120Hz."

LPF SLOP*³ (Low Pass Filter Slope)

Selects the LPF slope: "1," "2," "3."

SW PHASE*⁴ (Subwoofer Phase)

Selects the subwoofer phase: "NORM," "REV."

HPF FREQ (High Pass Filter Frequency)

Selects the front/rear speaker cut-off frequency: "OFF," "50Hz," "60Hz," "80Hz," "100Hz," "120Hz."

HPF SLOP (High Pass Filter Slope)

Selects the HPF slope (effective only when HPF FREQ is set to other than "OFF"): "1," "2," "3."

LOUDNESS (Dynamic Loudness)

Reinforces bass and treble for clear sound at low volume levels: "ON," "OFF."

BTM (page 10)

*¹ When the unit is turned off.

*² When FM is received.

*³ When the audio output is set to "SUB-OUT" or Rear Bass Enhancer is set to other than "OFF."

*⁴ When the audio output is set to "SUB-OUT."

Other functions

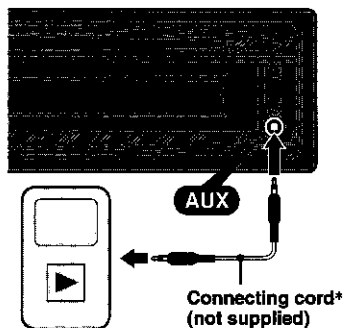
Using optional equipment

Auxiliary audio equipment

By connecting an optional portable audio device to the AUX input jack (stereo mini jack) on the unit and then simply selecting the source, you can listen on your car speakers. The volume level is adjustable for any difference between the unit and the portable audio device. Follow the procedure below:

Connecting the portable audio device

- 1 Turn off the portable audio device.
- 2 Turn down the volume on the unit.
- 3 Connect to the unit.



* Be sure to use a straight type plug.

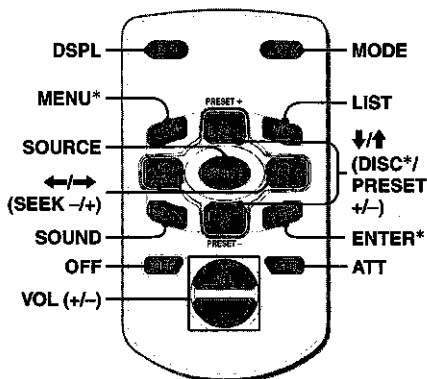
Adjusting the volume level

Be sure to adjust the volume for each connected audio device before playback.

- 1 Turn down the volume on the unit.
- 2 Press **(SOURCE/OFF)** repeatedly until "AUX" appears.
After that, "AUX FRONT IN" appears.
- 3 Start playback of the portable audio device at a moderate volume.
- 4 Set your usual listening volume on the unit.
- 5 Adjust the input level (page 14).

RM-X114 Card Remote Commander

The corresponding buttons on the card remote commander control the same functions as those on this unit.



The following buttons on the card remote commander have also different buttons/functions from the unit.

- **DSPL (display) button**
To change display items.
- **SOURCE button**
To turn on the power; change the source (Radio/CD/USB/AUX).
- **<-/> (SEEK -/+) buttons**
To control Radio/CD/USB, the same as **(SEEK -/+)** on the unit.
- **SOUND button**
The same as the select button on the unit.
- **OFF button**
To turn off the power; stop the source.
- **LIST button**
To select PTY in RDS.
- **<u>↑</u>/<u>↓</u> (DISC*/PRESET +/-) buttons**
To select stored stations (Radio).
To control CD/USB, the same as **(1)/(2) (ALBUM -/+)** buttons on the unit.
- **ATT (attenuate) button**
To attenuate the sound. To cancel, press again.

* Not available for this unit.

Note

If the unit is turned off and the display disappears, it cannot be operated with the card remote commander unless **(SOURCE/OFF)** on the unit is pressed, or a disc is inserted to activate the unit first.

Additional Information

Precautions

- Cool off the unit beforehand if your car has been parked in direct sunlight.
- Power antenna (aerial) extends automatically.

Moisture condensation

Should moisture condensation occur inside the unit, remove the disc and wait for about an hour for it to dry out; otherwise the unit will not operate properly.

To maintain high sound quality

Do not splash liquid onto the unit or discs.

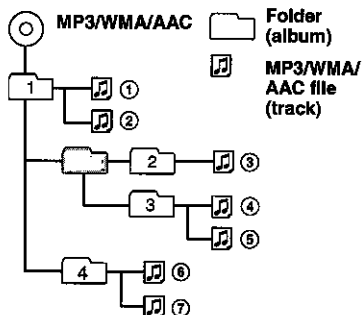
Notes on discs

- Do not expose discs to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight.
- Before playing, wipe the discs with a cleaning cloth from the center out. Do not use solvents such as benzine, thinner, commercially available cleaners.
- This unit is designed to playback discs that conform to the Compact Disc (CD) standard. DualDiscs and some of the music discs encoded with copyright protection technologies do not conform to the Compact Disc (CD) standard, therefore, these discs may not be playable by this unit.
- **Discs that this unit CANNOT play**
 - Discs with labels, stickers, or sticky tape or paper attached. Doing so may cause a malfunction, or may ruin the disc.
 - Discs with non-standard shapes (e.g., heart, square, star). Attempting to do so may damage the unit.
 - 8 cm (3 1/4 in) discs.



– CD-R/CD-RW other than those recorded in music CD format or MP3 format conforming to ISO9660 Level 1/Level 2, Joliet/Romeo or multi-session.

Playback order of MP3/WMA/AAC files



If you have any questions or problems concerning your unit that are not covered in this manual, consult your nearest Sony dealer.

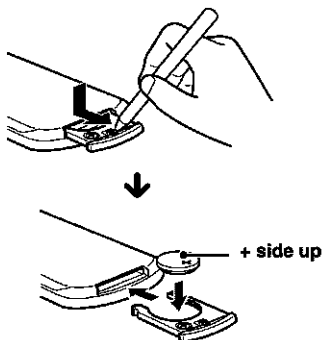
Notes on CD-R/CD-RW discs

- The maximum number of: (CD-R/CD-RW only)
 - folders (albums): 150 (including root folder)
 - files (tracks) and folders: 300 (may less than 300 if folder/file names contain many characters)
 - displayable characters for a folder/file name: 32 (Joliet)/64 (Romeo)
- If the multi-session disc begins with a CD-DA session, it is recognized as a CD-DA disc, and other sessions are not played back.
- **Discs that this unit CANNOT play**
 - CD-R/CD-RW of poor recording quality.
 - CD-R/CD-RW recorded with an incompatible recording device.
 - CD-R/CD-RW which is finalized incorrectly.

Maintenance

Replacing the lithium battery of the card remote commander

Under normal conditions, the battery will last approximately 1 year. (The service life may be shorter, depending on the conditions of use.) When the battery becomes weak, the range of the card remote commander becomes shorter. Replace the battery with a new CR2025 lithium battery. Use of any other battery may present a risk of fire or explosion.



Notes on the lithium battery

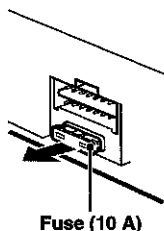
- Keep the lithium battery out of the reach of children. Should the battery be swallowed, immediately consult a doctor.
- Wipe the battery with a dry cloth to assure a good contact.
- Be sure to observe the correct polarity when installing the battery.
- Do not hold the battery with metallic tweezers, otherwise a short-circuit may occur.

WARNING

Battery may explode if mistreated.
Do not recharge, disassemble, or dispose of in fire.

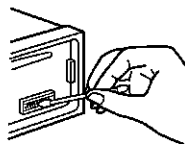
Fuse replacement

When replacing the fuse, be sure to use one matching the amperage rating stated on the original fuse. If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In such a case, consult your nearest Sony dealer.

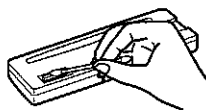


Cleaning the connectors

The unit may not function properly if the connectors between the unit and the front panel are not clean. In order to prevent this, detach the front panel (page 7) and clean the connectors with a cotton swab. Do not apply too much force. Otherwise, the connectors may be damaged.



Main unit



Back of the front panel

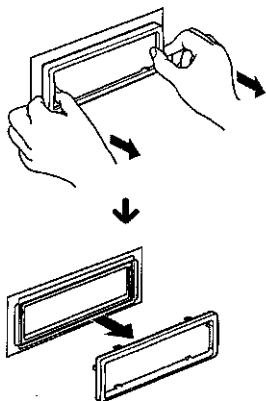
Notes

- For safety, turn off the ignition before cleaning the connectors, and remove the key from the ignition switch.
- Never touch the connectors directly with your fingers or with any metal device.

Removing the unit

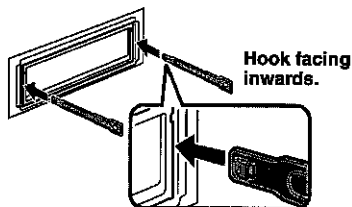
1 Remove the protection collar.

- 1 Detach the front panel (page 7).
- 2 Pinch both edges of the protection collar, then pull it out.

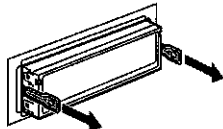


2 Remove the unit.

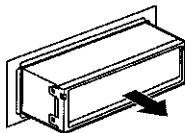
- 1 Insert both release keys simultaneously until they click.



- 2 Pull the release keys to unseat the unit.



- 3 Slide the unit out of the mounting.



Specifications

Tuner section

FM

Tuning range: 87.5 – 108.0 MHz

Antenna (aerial) terminal:

External antenna (aerial) connector

Intermediate frequency: 150 kHz

Usable sensitivity: 10 dBf

Selectivity: 75 dB at 400 kHz

Signal-to-noise ratio: 70 dB (mono)

Separation: 40 dB at 1 kHz

Frequency response: 20 – 15,000 Hz

MW/LW

Tuning range:

MW: 531 – 1,602 kHz

LW: 153 – 279 kHz

Antenna (aerial) terminal:

External antenna (aerial) connector

Intermediate frequency: 25 kHz

Sensitivity: MW: 26 µV, LW: 45 µV

CD Player section

Signal-to-noise ratio: 120 dB

Frequency response: 10 – 20,000 Hz

Wow and flutter: Below measurable limit

USB Player section

Interface: USB (Full-speed)

Maximum current: 500 mA

Power amplifier section

Output: Speaker outputs

Speaker impedance: 4 – 8 ohms

Maximum power output: 52 W × 4 (at 4 ohms)

General

Outputs:

Audio outputs terminal (rear/sub switchable)

Power antenna (aerial) relay control terminal

Power amplifier control terminal

Inputs:

Telephone ATT control terminal

Remote controller input terminal

Antenna (aerial) input terminal

AUX input jack (stereo mini jack)

USB signal input connector

Power requirements: 12 V DC car battery
(negative ground (earth))

Dimensions: Approx. 178 × 50 × 179 mm
(7 ¹/₈ × 2 × 7 ¹/₈ in) (w/h/d)

Mounting dimensions: Approx. 182 × 53 × 162 mm
(7 ¹/₄ × 2 ¹/₈ × 6 ¹/₂ in) (w/h/d)

Mass: Approx. 1.2 kg (2 lb 11 oz)

Supplied accessory:

Parts for installation and connections (1 set)

Optional accessory/equipment:

Card remote commander: RM-X114

continue to next page →

Your dealer may not handle some of the above listed accessories. Please ask the dealer for detailed information.

Design and specifications are subject to change without notice.

Troubleshooting

The following checklist will help you remedy problems you may encounter with your unit. Before going through the checklist below, check the connection and operating procedures.

If the problem is not solved, visit the following support site.

Support site

<http://support.sony-europe.com/>

General

No power is being supplied to the unit.

- Check the connection or fuse.
- If the unit is turned off and the display disappears, it cannot be operated with the remote commander.
→ Turn on the unit.

The power antenna (aerial) does not extend.

The power antenna (aerial) does not have a relay box.

No sound.

- The ATT function is activated, or the Telephone ATT function (when the interface cable of a car telephone is connected to the ATT lead) is activated.
- The position of the fader control "FADER" is not set for a 2-speaker system.

No beep sound.

- The beep sound is canceled (page 17).
- An optional power amplifier is connected and you are not using the built-in amplifier.

The contents of the memory have been erased.

- The RESET button has been pressed.
→ Store again into the memory.
- The power supply lead or battery has been disconnected or it is not connected properly.

Stored stations and correct time are erased.

The fuse has blown.

Makes noise when the position of the ignition is switched.

The leads are not matched correctly with the car's accessory power connector.

During playback or reception, demonstration mode starts.

If no operation is performed for 5 minutes with "DEMO-ON" set, demonstration mode starts.
→ Set "DEMO-OFF" (page 17).

The display disappears from/does not appear in the display window.

- The dimmer is set to "DIM-ON" (page 17).
- The display disappears if you press and hold **(SOURCE/OFF)**.
→ Press **(SOURCE/OFF)** on the unit until the display appears.
- The connectors are dirty (page 20).

The Auto Off function does not operate.

The unit is turned on. The Auto Off function activates after turning off the unit.

→ Turn off the unit.

Radio reception

The stations cannot be received.**The sound is hampered by noises.**

- The connection is not correct.
 - Connect a power antenna (aerial) control lead (blue) or accessory power supply lead (red) to the power supply lead of a car's antenna (aerial) booster (only when your car has built-in FM/MW/LW antenna (aerial) in the rear/side glass).
 - Check the connection of the car antenna (aerial).
 - If the auto antenna (aerial) will not go up, check the connection of the power antenna (aerial) control lead.
-

Preset tuning is not possible.

- Store the correct frequency in the memory.
 - The broadcast signal is too weak.
-

Automatic tuning is not possible.

- Setting of the local seek mode is not correct.
 - Tuning stops too frequently:
 - Set "LOCAL-ON" (page 17).
 - Tuning does not stop at a station:
 - Set "LOCAL-OFF" (page 17).
 - The broadcast signal is too weak.
 - Perform manual tuning.
-

During FM reception, the "ST" indication flashes.

- Tune in the frequency accurately.
 - The broadcast signal is too weak.
 - Set "MONO-ON" (page 17).
-

An FM program broadcast in stereo is heard in monaural.

The unit is in monaural reception mode.
→ Set "MONO-OFF" (page 17).

RDS

The SEEK starts after a few seconds of listening.

The station is non-TP or has weak signal.
→ Deactivate TA (page 11).

No traffic announcements.

- Activate TA (page 11).
 - The station does not broadcast any traffic announcements despite being TP.
 - Tune in another station.
-

PTY displays "-----."

- The current station is not an RDS station.
 - RDS data has not been received.
 - The station does not specify the program type.
-

Program service name flashes.

There is no alternative frequency for the current station.

→ Press (SEEK) +/- while the program service name is flashing. "PI SEEK" appears and the unit starts searching for another frequency with the same PI (Program Identification) data.

CD playback

The disc cannot be loaded.

- Another disc is already loaded.
 - The disc has been forcibly inserted upside down or in the wrong way.
-

The disc does not playback.

- Defective or dirty disc.
 - The CD-Rs/CD-RWs are not for audio use (page 19).
-

MP3/WMA/AAC files cannot be played back.

The disc is incompatible with the MP3/WMA/AAC format and version. For details on playable discs and formats, visit the support site.

MP3/WMA/AAC files take longer to play back than others.

The following discs take a longer time to start playback.

- a disc recorded with a complicated tree structure.
 - a disc recorded in Multi Session.
 - a disc to which data can be added.
-

The display items do not scroll.

- For discs with very many characters, those may not scroll.
 - "AUTO SCR" is set to "OFF".
 - Set "A.SCR-L-ON" (page 17).
 - Press and hold (DSPL) (SCRL).
-

The sound skips.

- Installation is not correct.
 - Install the unit at an angle of less than 45° in a sturdy part of the car.
 - Defective or dirty disc.
-

The operation buttons do not function.**The disc will not eject.**

Press the RESET button (page 6).

continue to next page →

USB playback

You cannot play back items via a USB hub.

This unit cannot recognize USB devices via a USB hub.

Cannot play back items.

A USB device does not work.

→ Reconnect it.

The USB device takes longer to play back.

The USB device contains files with a complicated tree structure.

A beep sounds.

During playback, the USB device has been disconnected.

→ Before disconnecting a USB device, make sure to stop playback first for data protection.

The sound is intermittent.

The sound may be intermittent at a high-bit-rate of more than 320 kbps.

Error displays/Messages

CHECKING

The unit is confirming the connection of a USB device.

→ Wait until confirming the connection is finished.

ERROR

- The disc is dirty or inserted upside down.
→ Clean or insert the disc correctly.
- A blank disc has been inserted.
- The disc cannot play due to a problem.
→ Insert another disc.
- USB device was not automatically recognized.
→ Reconnect it again.
- Press **▲** to remove the disc.

FAILURE

The connection of speakers/amplifiers is incorrect.

→ See the installation/connections manual of this model to check the connection.

HUB NO SUPRT (Hubs Not Support)

USB hub is not supported on this unit.

L. SEEK +/-

The local seek mode is on during automatic tuning.

NO AF

There is no alternative frequency for the current station.

→ Press **(SEEK)** +/- while the program service name is flashing. The unit starts searching for another frequency with the same PI (Program Identification) data ("PI SEEK" appears).

NO DEV (No Device)

USB is selected as source without a USB device connected. A USB device or a USB cable has been disconnected during playback.

→ Be sure to connect a USB device and USB cable.

NO MUSIC

The disc or USB device does not contain a music file.

→ Insert a music CD in this unit.

→ Connect a USB device with a music file in it.

NO NAME

A disc/album/artist/track name is not written in the track.

NO TP

The unit will continue searching for available TP stations.

OFFSET

There may be an internal malfunction.

→ Check the connection. If the error indication remains on in the display, consult your nearest Sony dealer.

OVERLOAD

USB device is overloaded.

→ Disconnect the USB device, then change the source by pressing **(SOURCE/OFF)**.

→ Indicates that the USB device is out of order, or an unsupported device is connected.

READ

The unit is reading all track and album information on the disc.

→ Wait until reading is complete and playback starts automatically. Depending on the disc structure, it may take more than a minute.

RESET

This unit or USB device cannot be operated due to a problem.

→ Press the RESET button (page 6).

USB NO SUPRT (USB Not Support)

The connected USB device is not supported.

→ For details on the compatibility of your USB device, visit the support site.

“LLLL” or “rrrr”

During reverse or fast-forward, you have reached the beginning or the end of the disc and you cannot go any further.

“ ”

The character cannot be displayed with the unit.

If these solutions do not help improve the situation, consult your nearest Sony dealer.

If you take the unit to be repaired because of CD playback trouble, bring the disc that was used at the time the problem began.

Wichtig!

Bitte nehmen Sie sich etwas Zeit, um den Geräte-Pass vollständig auszufüllen. Dieser befindet sich auf der hinteren Umschlagseite dieser Bedienungsanleitung.

Montieren Sie dieses Gerät aus Sicherheitsgründen im Armaturenbrett des Fahrzeugs. Zur Installation und zum Anschluss siehe die mitgelieferte Installations-/Anschlussanleitung.

**CLASS 1
LASER PRODUCT**

Dieses Etikett befindet sich an der Unterseite des Gehäuses.

Hinweis für Kunden: Die folgenden Informationen gelten nur für Geräte, die in Ländern verkauft werden, in denen EU-Richtlinien gelten

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Entsorgung von gebrauchten elektrischen und elektronischen Geräten (anzuwenden in den Ländern der Europäischen Union und anderen europäischen Ländern mit einem separaten Sammelsystem für diese Geräte)

Das Symbol auf dem Produkt oder seiner Verpackung weist darauf hin, dass dieses Produkt nicht als normaler Haushaltsabfall zu behandeln ist, sondern an einer Annahmestelle für das Recycling von elektrischen und elektronischen Geräten abgegeben werden muss. Durch Ihren Beitrag zum korrekten Entsorgen dieses Produkts schützen Sie die Umwelt und die Gesundheit Ihrer Mitmenschen. Umwelt und Gesundheit werden durch falsches Entsorgen gefährdet. Materialrecycling hilft, den Verbrauch von Rohstoffen zu verringern. Weitere Informationen zum Recycling dieses Produkts erhalten Sie bei Ihrer Gemeindeverwaltung, den kommunalen Entsorgungsbetrieben oder dem Geschäft, in dem Sie das Produkt gekauft haben.

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Registrieren Sie Ihr Produkt jetzt bei:
Merci d'enregister votre produit en ligne sur :
Registra online il tuo prodotto su:
Registreer uw product nu online via:

www.sony-europe.com/myproducts

Tragen Sie die Seriennummer (SERIAL NO.) in dem reservierten Feld ein. Sie finden diese auf einem Aufkleber, der auf dem Gerätegehäuse angebracht ist. Nehmen Sie den ausgefüllten Geräte-Pass anschließend unbedingt aus der Bedienungsanleitung heraus, falls Sie diese im Fahrzeug aufbewahren möchten. Bitte bewahren Sie den Geräte-Pass an einem sicheren Ort auf. Er kann im Falle eines Diebstahls zur Identifikation Ihres Eigentums dienen.

caraudio

Geräte-Pass

SONY®

Dieser Geräte-Pass dient als Eigentumsnachweis für Ihr caraudio-Gerät im Falle eines Diebstahls.

Wir empfehlen, den Geräte-Pass nicht im Fahrzeug aufzubewahren, um Missbrauch zu verhindern.

Modellbezeichnung

CDX-GT450U

Seriennummer (SERIAL NO.)

<http://www.sony.net/>

Sony Corporation Printed in Thailand



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